

IN THE CLAIMS

1. (Currently Amended) A multi-view image generation unit (100, 200) for generating a multi-view image on basis of an input image, the generation unit comprising:
 - edge detection means (102) for detecting an edge in the input image;
 - depth map generation means (104) for generating a depth map for the input image on basis of the edge, a first group of elements of the depth map corresponding to the edge having a first depth value, related to a viewer of the multi-view image, and a second group of elements of the depth map corresponding to a region of the input image, being located adjacent to the edge, having a second depth value, related to the viewer of the multi-view image, the first value being less than the second value; and
 - rendering means (106) for rendering the multi-view image ~~on basis of~~ using the input image and the depth map corresponding to the two depth values.
2. (Currently Amended) A multi-view image generation unit (100) as claimed in claim 1, wherein the edge detection means (102) is ~~are~~ arranged to detect the edge by computing pixel value differences between first pixel values of the input image and respective second pixel values of a second input image, the input image and the second input image belonging to a sequence of video images.
3. (Original) A multi-view image generation unit (100) as claimed in claim 2, wherein the first pixel values represent one of color and luminance.
4. (Original) A multi-view image generation unit (100) as claimed in claim 2, wherein the first depth value is a function of a first one of the pixel value differences.
5. (Cancel).
6. (Cancel).
7. (Cancel).

8. (Currently Amended) An image processing apparatus (600) comprising:

- receiving means (602) for receiving a signal corresponding to an input image; and
- a multi-view image generation unit (604) for generating a multi-view image on basis of the input image, ~~as claimed in claim 1.~~ **having**
edge detection means (102) for detecting an edge in the input image;
- **depth map generation means (104) for generating a depth map for**
the input image on basis of the edge, a first group of elements of the depth map
corresponding to the edge having a first depth value, related to a viewer of the multi-view
image, and a second group of elements of the depth map corresponding to a region of the
input image, being located adjacent to the edge, having a second depth value, related to the
viewer of the multi-view image, the first value being less than the second value; and
rendering means (106) for rendering the multi-view image using the
input image and the depth map corresponding to the two depth values.

9. (Original) An image processing apparatus (600) as claimed in claim 8, further comprising a multi-view display device (606) for displaying the multi-view image.

10. (Currently Amended) A method of generating a multi-view image on basis of an input image, the method comprising:

- detecting an edge in the input image;
- generating a depth map for the input image on basis of the edge, a first group of elements of the depth map corresponding to the edge having a first depth value, related to a viewer of the multi-view image, and a second group of elements of the depth map corresponding to a region of the input image, being located adjacent to the edge, having a second depth value, related to the viewer of the multi-view image, the first value being less than the second value; and
- rendering the multi-view image ~~on basis of~~ **using** the input image and the depth map **corresponding to the two depth values.**

11. (Currently Amended) A computer readable storage medium ~~program product to be loaded by a computer arrangement~~, comprising instructions executable by a processor to generate a multi-view image on basis of an input image, the medium comprising, ~~the computer arrangement comprising processing means and a memory, the computer program product, after being loaded, providing said processing means with the capability to carry out:~~

code for detecting an edge in the input image;
code for generating a depth map for the input image on basis of the edge, a first group of elements of the depth map corresponding to the edge having a first depth value, related to a viewer of the multi-view image, and a second group of elements of the depth map corresponding to a region of the input image, being located adjacent to the edge, having a second depth value, related to the viewer of the multi-view image, the first value being less than the second value; and

code for rendering the multi-view image ~~on basis of~~ using the input image and the depth map corresponding to the two depth values.